

# Pharmacotherapy of complications of diabetes

## Diabetic ketoacidosis and hyperosmolar coma

- **insulin** i . v. infusion
- payment deficit fluids and minerals
  - first **physiological solution**
  - Mon decline blood glucose below 15 mmol /l **5% solution glucose**
  - replacement potassium KCl solution \_ \_

## Hypoglycemia

- **lighter form:** glucose po
- **harder form:** glucose after or glucagon sc or and \_ m.

## Chronic complication diabetes

The key is prevention complications by maintaining normoglycemia .

### Diabetic nephropathy [1]

*More details in the article Complications diabetes mellitu*

In the period when she is present only microalbuminuria whose proteinuria without signs reduced function kidneys , it is necessary effectively heal hypertension ( mainly **ACE inhibitors**), strive for **good compensation diabetes** and **treat and asymptomatic infection urinary roads** .

In stage chronic insufficiency kidney is necessary reduce income proteins in diet , according to needs edit income sodium , potassium and fluids . Calcium and active salts should be given metabolites of vitamin D. In case needs must be corrected \_ disorders blood formation and metabolic acidosis . **At high levels acid urinary is appropriate administer allopurinol and according hypolipidemic needs . Sick in the terminal stages insufficiency kidneys they are included in hemodialysis transplant program .**

### Diabetic retinopathy [2]

*More details in the article Complications diabetes mellitu*

Anti-VEGF therapy intravitreal ( ranibizumab , afibercept ) prevents proliferation vessel .

### Diabetic polyneuropathy [1]

*More details in the article Complications diabetes mellitu*

Therapy is mostly symptomatic .

For paresthesia and sensorimotor pain \_ neuropathy **are used analgesics (aspirin, paracetamol), tricyclic antidepressants , carbamazepine or acid thioceto** . Acid thioceto *is a similar substance vitamins with function coenzyme . It improves endoneurial perfusion , increases level physiological antioxidant glutathione and itself as an antioxidant reduces amount free oxygen radicals in the nerve disabled diabetic polyneuropathy . Clinical experiences have proven favorably effects on symptoms such as burning , paresthesia , numbness and pain .* <sup>[3]</sup>

**U autonomous neuropathy** affecting digestive device it happens the biggest a problem diarrhea , for which it is suitable administration antidiarrheic . Vomiting and more speeches diabetic gastroparesis they can favorably affect prokinetics . In neuropathic orthostatic hypotension is necessary revise existing antihypertensive therapy and exclude medicines that can \_ \_ on trouble participate with their own unwanted effects . Patients with neurogenic urinary bladder you are at micturition they can help repeated pressure on buckle stydou , in the austere cases themselves \_ they coil . Pharmacologically you can try administer cholinergic or α-1-sympatholytic .

### Diabetic leg

Antibacterial therapy guided on basis results cultivation examination and local therapy , focused on systematic cleaning wounds , support granulation and epithelization ( see Therapy ulcers and wounds).

In therapy angiopathic diabetic foot is the principle improvement vascular supply (PTA ) that is indicated on basis angiographic examination . In patients with peripheral diffuse disabilities , in which can't to perform revascularization is possible serve drugs for ' **prophylaxis emergence thrombotic closures** and to **improvement flow Properties blood** - haemoreologica ( pentoxifylline ), vasoactive substances , prostanoids ( alprostadil , iloprost ), also anti- aggregation or oral anticoagulants , though effect pharmacotherapy is questionable .<sup>[1]</sup>

1. SUCHOPÁR, Josef, VALENTOVÁ, Štěpánka , ed. *Remedia compendium*. 4th ed . Prague: Panax , 2009. <nowiki>ISBN 978-80-902806-4-9</nowiki>.
2. KALVODOVÁ, Bohdana and Pavlína SKALICKÁ. Diabetic retinopathy - options pharmacotherapy and advances in treatment . *Remedia* [online]. 2014, (1) [cit. 2018-08-01]. Available from: <http://www.remedie.cz/Okruhy-temat/Diabetologie/Diabeticka-retinopatie-moznosti-pharmakoterapie-a-pokroky-v-lecbe/8-V-1C8.magarticle.aspx>
3. THIOGAMMA 600 ORAL Coated SPC tablet . *Mediatechs database of Medicines* [online]. [feeling. 2018-08-01]. Available from: <https://medately.co/cz/drugs/NRbOhVL5i0b4S3POU6kmXDcFm8o/thiogamma-600-oral-potahovana-tableta>